

AMENDMENTS TO THE CLAIMS

1. (Original) A target object inspection system comprising:
 - a first detector for detecting radiation from a radiation source;
 - a second detector for detecting radiation from the target object;
 - a mobile platform including the first detector, the second detector and the radiation source; and
 - a boom connected to the radiation source and the mobile platform, wherein the boom is deployed so as to effect passage of the target object between the radiation source and the first and second detectors.
2. (Original) The system according to claim 1, wherein the first detector is a photon detector.
3. (Original) The system according to claim 1, wherein the second detector is a neutron detector.
4. (Original) The system according to claim 1, wherein the first detector detects radiation from the radiation source after the radiation passes through the target object.
5. (Original) The system according to claim 1, wherein the radiation source is a gamma radiation source.
6. (Original) The system according to claim 3, wherein the neutron detector comprises at least one helium detector.
7. (Original) The system according to claim 2, further comprising:
 - a counter for discretely counting photons received by the first detector; and
 - a display responsive to the counter for generating a display of the target object in response to the counter.
8. (Original) The system according to claim 3, further comprising an indicator for indication the presence of neutrons.
- 9-23. (Cancelled).
24. (New) A target object inspection system comprising:
 - a first detector for detecting radiation from a radiation source;

_____ a second detector for detecting radiation from the target object;
_____ a mobile platform including the first detector, the second detector and the radiation
source; and
_____ a boom connected to the radiation source and the mobile platform, wherein the boom is
deployed so as to effect passage of the target object between the radiation source and the mobile
platform, including the first and second detectors.

25. (New) The system according to claim 24, wherein the first detector is a photon detector.

26. (New) The system according to claim 24, wherein the second detector is a neutron
detector.

27. (New) The system according to claim 24, wherein the first detector detects radiation from
the radiation source after the radiation passes through the target object.

28. (New) The system according to claim 24, wherein the radiation source is a gamma
radiation source.

29. (New) The system according to claim 26, wherein the neutron detector comprises at least
one helium detector.

30. (New) The system according to claim 25, further comprising:
_____ a counter for discretely counting photons received by the first detector; and
_____ a display responsive to the counter for generating a display of the target object in response
to the counter.

31. (New) The system according to claim 26, further comprising an indicator for indication
the presence of neutrons.

32. (New) A target object inspection system comprising:
_____ a first detector for detecting radiation from a radiation source;
_____ a second detector for detecting radiation from the target object;
_____ a mobile platform capable of movement during the inspection of the target object
including the first detector, the second detector and the radiation source; and

a boom connected to the radiation source and the mobile platform, wherein the boom is deployed so as to effect passage of the target object between the radiation source and the first and second detectors.

33. (New) The system according to claim 32, wherein the first detector is a photon detector.

34. (New) The system according to claim 32, wherein the second detector is a neutron detector.

35. (New) The system according to claim 32, wherein the first detector detects radiation from the radiation source after the radiation passes through the target object.

36. (New) The system according to claim 32, wherein the radiation source is a gamma radiation source.

37. (New) The system according to claim 34, wherein the neutron detector comprises at least one helium detector.

38. (New) The system according to claim 33, further comprising:

a counter for discretely counting photons received by the first detector; and

a display responsive to the counter for generating a display of the target object in response to the counter.

39. (New) The system according to claim 34, further comprising an indicator for indication the presence of neutrons.